ABSTRACT

HIGH PRECISION APPARATUS FOR IMPOSING OR MEASURING A POSITION OR A FORCE

High precision apparatus is described which can be arranged and used in the form of manipulators, actuators, position transducers or force transducers, having four to six degrees of freedom. A movable platform (2), to which the object (3) subjected to movements or forces is fixed, is connected to a base (1) of the apparatus by six links in parallel. These links comprise articulated kinematic units (11-16) each comprising a deformable parallelogram and an articulated transmission device connecting the parallelogram to the platform (2). The parallelogram is associated with a position sensor and an electromagnetic transducer, such as a linear motor.

Figure 2